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DEVELOPMENTS IN MARKETING SPREADS FOR AGRICULTURAL PRODUCTS IN 1963

U.S. DEPT. OF AGRICULTURE

Marketing Economics Division
Economic Research Service
U. S. Department of Agriculture

(Reprinted from Hearings Before the Subcommittee of the Committee on Appropriations, United States House of Representatives, Eighty-Eighth Congress, Second Session)

PREFACE

The Congress in 1955 directed the Department of Agriculture to make special studies of spreads between prices paid by consumers and those received by farmers. The reports published in 1963 and early 1964 are summarized in this report, which was prepared for the Subcommittees of the Committees on Appropriations of the House of Representatives and of the United States Senate.

Seven similar reports summarize the results of earlier studies: Special Margins and Costs Studies, Marketing Research Report No. 187, April 1957; Special Studies of Marketing Costs and Practices, Marketing Research Report No. 240, October 1958; Developments in Marketing Spreads for Agricultural Products in 1958, AMS-316, June 1959; Developments in Marketing Spreads for Agricultural Products in 1959, AMS-374, May 1960; Developments in Marketing Spreads for Agricultural Products in 1960, ERS-14(1961), July 1961; Developments in Marketing Spreads for Agricultural Products in 1961, ERS-14(1962), October 1962; Developments in Marketing Spreads for Agricultural Products in 1962, ERS-14(1963), August 1963.

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Washington, D.C. August 1964

DEVELOPMENTS IN MARKETING SPREADS FOR AGRICULTURAL PRODUCTS IN 1963

HIGHLIGHTS

1. The spread between farm and retail prices of food products in the market basket of farm foods continued to widen in 1963. 1/ The increase of 4 percent last year was the largest since 1958 and double the average annual increase in 1953-62 (table 1 and fig. 1).

2. Retail prices of farm-originated food products averaged only 1 percent higher in 1963 than in 1962. Thus, the larger part of the increase in the farm-retail spread in 1963 resulted in lower prices to farmers.

3. Farmers received an average of 37 cents of each dollar consumers spent for farm-originated food products in retail stores last year, 1 cent less than in 1962. This was the smallest farmer's share since 1934, when it was 34 cents (fig. 2).

4. Beef, processed orange products, and bread accounted for about three-fourths of the increase in the market basket farm-retail spread in 1963, although the spread for many other products also widened (tables 2 and 3). Much of the increase in the market-basket spread came in the first quarter, when prices farmers received for beef cattle dropped much more than retail prices of beef.

5. Consumers spent more per person last year for food than in 1962, but the proportion of their total income spent for food continued to decline.

6. Retail prices of 25 items of cotton clothing and household furnishings averaged slightly higher in 1963. The farm-retail spread also increased modestly, as the farm value of the cotton used in these articles decreased slightly. Average prices and spreads for cotton products have varied within a relatively narrow range in recent years and have shown no marked uptrend (table 11).

7. Retail prices of cigarettes continued a long-term uptrend. Total expenditures for cigarettes more than doubled from $3.0 billion in 1947 to $6.8 billion in 1962 (latest available data). However, the farmer's share of these expenditures has declined to less than 10 percent as total returns to farmers for tobacco used in cigarettes increased only from $418 million in 1947 to $672 million in 1962. Federal, State, and local excise taxes made up about 45 percent of the total expenditure for cigarettes in 1962, a slightly smaller proportion than in 1947 (fig. 14).

FOOD MARKETING COSTS RISE IN 1963

A rise in operating costs of food marketing firms accompained an increase in farm-retail spreads for farm food products during 1963.

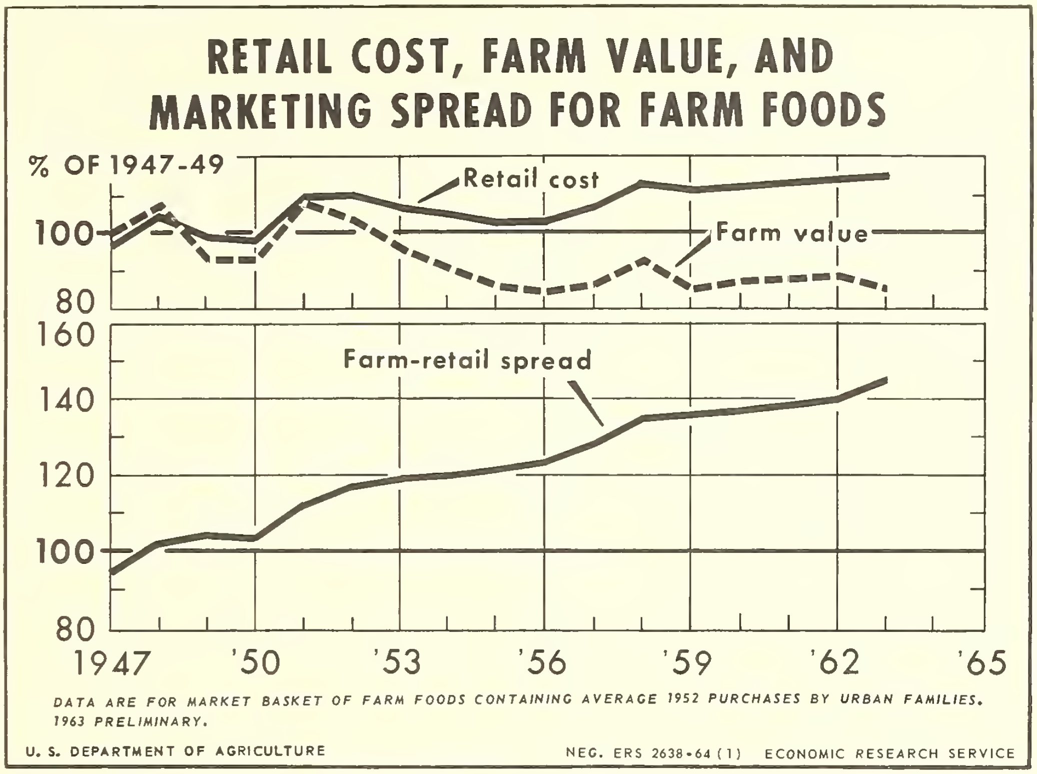
1/ The market basket contains the average quantities of farm-originated foods purchased per family in 1952 by urban wage-earner and clerical worker families. The farm-retail spread is the difference between the retail cost of these foods and the farm value or return to farmers for farm products equivalent to the foods in the market basket.

Table 1.--The farm food market basket: Retail cost, farm value, farm-retail spread, and farmer's share of retail cost, 1953-63 1/

Year and month	Retail cost 2/	Farm value 3/	Farm-retail spread	Farmer's share
	Dollars	Dollars	Dollars	Percent
1953	1,003	445	558	44
1954	986	421	565	43
1955	969	395	574	41
1956	972	390	582	40
1957	1,007	401	606	40
1958	1,064	430	634	40
1959	1,040	398	642	38
1957-59 average	1,037	410	627	40
1960	1,053	407	646	39
1961	1,060	406	654	38
1962	1,068	409	659	38
1963 4/	1,078	394	684	37
1962				
January	1,056	411	645	39
February	1,066	416	650	39
March	1,064	413	651	39
April	1,067	407	660	38
May	1,063	398	665	37
June	1,067	398	669	37
July	1,068	400	668	37
August	1,068	412	656	39
September	1,085	423	662	39
October	1,075	411	664	38
November	1,069	412	657	38
December	1,062	406	656	38
1963				
January	1,078	408	670	38
February	1,084	398	686	37
March	1,079	392	687	36
April	1,071	391	680	36
May	1,069	385	684	36
June	1,075	391	684	36
July	1,088	403	685	37
August	1,090	397	693	36
September	1,082	390	692	36
October	1,075	392	683	37
November	1,074	395	679	37
December 4/	1,076	384	692	36

1/ The farmer's share and index numbers of the retail cost, farm value, and farm-retail spread for the years 1913-61 (1957-59=100) are published in the February 1962 Marketing and Transportation Situation (MTS-144) p. 50. 2/ Retail cost of average quantities purchased per family in 1952 by urban wage-earner and clerical worker families, calculated from retail prices collected by the Bur. Labor Statistics. 3/ Payment to farmers for equivalent quantities of farm produce minus imputed value of byproducts obtained in processing. 4/ Preliminary estimates.

Current data are given in the Marketing and Transportation Situation, a quarterly publication of the Economic Research Service, and in the Statistical Summary, a monthly publication of the Statistical Reporting Service



RETAIL COST, FARM VALUE, AND MARKETING SPREAD FOR FARM FOODS

DATA ARE FOR MARKET BASKET OF FARM FOODS CONTAINING AVERAGE 1952 PURCHASES BY URBAN FAMILIES. 1963 PRELIMINARY.

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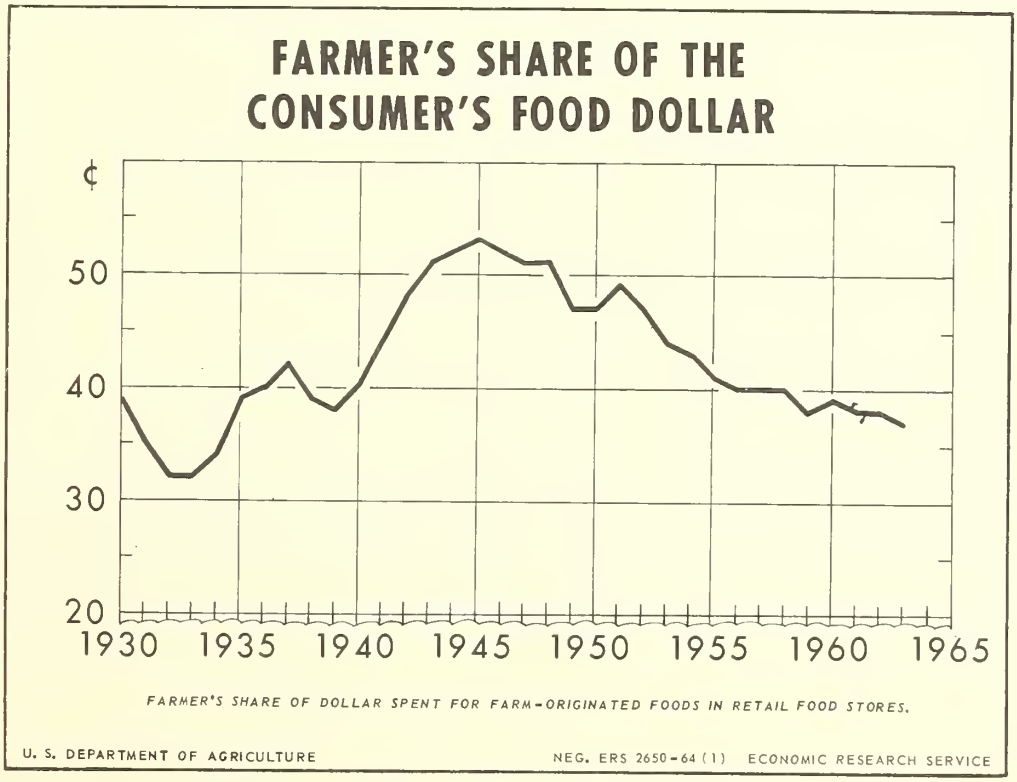
Figure 1



FARMER'S SHARE OF THE CONSUMER'S FOOD DOLLAR

FARMER'S SHARE OF DOLLAR SPENT FOR FARM-ORIGINATED FOODS IN RETAIL FOOD STORES.

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Figure 2

Table 2.--Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, annual 1962 1/

Product 2/	Farm equivalent	Retail unit	Retail cost	Gross farm value	Byproduct allowance	Net farm value	Farm-retail spread	Farmer's share 3/
			Dollars	Dollars	Dollars	Dollars	Dollars	Percent
Market basket	Farm produce equivalent to products bought by urban families	Average quantities purchased per urban wage-earner and clerical-worker family in 1952	1067.51	---	---	409.02	658.49	38
Meat products			284.13	---	---	150.42	133.71	53
Dairy products			200.27	---	---	87.77	112.50	44
Poultry and eggs			85.67	---	---	51.78	33.89	60
Bakery and cereal products								
All ingredients			170.47	---	---	30.98	139.49	18
Grain			---	26.68	3.01	23.67	---	14
All fruits and vegetables			238.70	---	---	69.27	169.43	29
Fresh fruits and vegetables			144.49	---	---	49.68	94.81	34
Fresh vegetables			71.93	---	---	22.77	49.16	32
Processed fruits and vegetables			94.20	---	---	19.59	74.61	21
Fats and oils			43.34	---	---	11.38	31.96	26
Miscellaneous products			44.93	---	---	7.42	37.51	17
			Cents	Cents	Cents	Cents	Cents	Percent
Beef (Choice grade)	2.25 lb. Choice grade cattle	Pound	82.4	56.6	4.8	51.8	30.6	63
Lamb (Choice grade)	2.37 lb. lamb	Pound	70.7	42.0	6.5	35.5	35.2	50
Pork (retail cuts)	2.13 lb. hogs	Pound	59.5	35.8	4.4	31.4	28.1	53
Butter	Cream and whole milk	Pound	75.2	---	---	54.5	20.7	72
Cheese, American process	Milk for American cheese	½ pound	36.2	---	---	14.5	21.7	40
Ice cream	Cream and milk	½ gallon	85.8	---	---	4/22.6	63.2	26
Milk, evaporated	Milk for evaporating	14-½ ounce can	15.6	---	---	6.2	9.4	40
Milk, fluid	Wholesale fluid milk	Quart	25.3	---	---	10.7	14.6	42
Chickens, frying, ready-to-cook	1.37 lb. broilers	Pound	40.7	---	---	20.9	19.8	51
Eggs	1.03 doz.	Dozen	51.8	---	---	34.7	17.1	67
Bread, white								
All ingredients	Wheat and other ingredients	Pound	21.2	---	---	3.1	18.1	15
Wheat	.882 lb. wheat	Pound	---	2.9	.3	2.6	---	12
Crackers, soda	1.38 lb. wheat	Pound	31.0	4.5	.5	4.0	27.0	13
Corn flakes	1.57 lb. white corn	12 ounces	27.3	3.3	.8	2.5	24.8	9
Corn meal	1.34 lb. white corn	Pound	14.0	2.8	.3	2.5	11.5	18
Flour, white	6.9 lb. wheat	5 pounds	57.0	22.5	2.4	20.1	36.9	35
Rolled oats	2.31 lb. oats	18 ounces	23.6	4.6	.6	4.0	19.6	17
Apples	1.08 lb. apples	Pound	16.5	---	---	5.8	10.7	35
Grapefruit	1.04 grapefruit	Each	13.6	---	---	2.4	11.2	18
Lemons	1.04 lb. lemons	Pound	20.4	---	---	5.5	14.9	27
Oranges	1.04 doz. oranges	Dozen	79.3	---	---	23.9	55.4	30
Beans, green	1.09 lb. snap beans	Pound	26.3	---	---	10.7	15.6	41
Cabbage	1.10 lb. cabbage	Pound	10.7	---	---	3.3	7.4	31
Carrots	1.06 lb. carrots	Pound	15.2	---	---	4.0	11.2	26
Celery	1.11 lb. celery	Pound	15.5	---	---	5.4	10.1	35
Lettuce	1.41 lb. lettuce	Head	18.9	---	---	6.1	12.8	32
Onions	1.06 lb. onions	Pound	12.2	---	---	4.0	8.2	33
Potatoes	10.42 lb. potatoes	10 pounds	63.2	---	---	16.9	46.3	27
Sweetpotatoes	1.12 lb. sweetpotatoes	Pound	15.8	---	---	5.6	10.2	35
Tomatoes	1.18 lb. tomatoes	Pound	29.7	---	---	10.6	19.1	36
Orange juice, canned	5.88 lb. Fla. oranges for canning	46 ounce can	42.5	---	---	12.7	29.8	30
Peaches, canned	1.89 lb. Calif. cling	No. 2-1/2 can	32.6	---	---	6.3	26.3	19
Beans with pork, canned	.35 lb. Mich. dry beans	16 ounce can	14.9	---	---	2.2	12.7	15
Corn, canned	2.49 lb. sweet corn	No. 303 can	20.0	---	---	2.4	17.6	12
Peas, canned	.69 lb. peas for canning	No. 303 can	22.5	---	---	2.9	19.6	13
Tomatoes, canned	1.84 lb. tomatoes for processing	No. 303 can	15.7	---	---	2.7	13.0	17
Orange juice concentrate, frozen	3.05 lb. Fla. oranges for frozen concentrated juice	6 ounce can	20.9	---	---	8.4	12.5	40
Strawberries, frozen	.51 lb. strawberries for processing	10 ounces	27.1	---	---	6.2	20.9	23
Beans, green, frozen	.71 lb. beans for processing	9 ounces	22.8	---	---	4.1	18.7	18
Peas, frozen	.70 lb. peas for freezing	10 ounces	20.8	---	---	3.0	17.8	14
Dried beans (navy)	1.00 lb. Mich. dry beans	Pound	17.4	---	---	6.2	11.2	36
Dried prunes	.97 lb. dried prunes	Pound	40.9	---	---	15.9	25.0	39
Margarine, colored	Soybeans, cottonseed and milk	Pound	28.4	---	---	7.0	21.4	25
Peanut butter	1.77 lb. peanuts	Pound	57.4	---	---	20.1	37.3	35
Salad dressing	Cottonseed, soybeans, sugar, and eggs	Pint	38.3	---	---	6.4	31.9	17
Vegetable shortening	Soybeans and cottonseed	3 pounds	88.8	---	---	25.4	63.4	29
Corn sirup	1.90 lb. corn	24 ounces	27.3	3.4	.7	2.7	24.6	10
Sugar	39.19 lb. sugar beets	5 pounds	58.5	22.4	1.1	5/21.3	5/37.2	5/36

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ This estimate of the farmer's share does not allow for Government payments to producers.

4/ Farm value of cream and milk only.

5/ Net farm value adjusted for Government payments to producer was 25.6 cents, farm-retail spread adjusted for Government processor tax was 34.5 cents, and farmer's share of retail cost based on adjusted farm value was 44 percent.

Table 3.--Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, annual 1963 1/

Product 2/	Farm equivalent	Retail unit	Retail cost	Gross farm value	Byproduct allowance	Net farm value	Farm-retail spread	Farmer's share 3/
			Dollars	Dollars	Dollars	Dollars	Dollars	Percent
Market basket	Farm produce equivalent to products bought by urban families	Average quantities purchased per urban wage-earner and clerical-worker family in 1952	1078.31	---	---	393.88	684.43	37
Meat products			278.23	---	---	133.27	144.96	48
Dairy products			199.54	---	---	87.29	112.25	44
Poultry and eggs			86.14	---	---	51.34	34.80	60
Bakery and cereal products								
All ingredients			172.74	---	---	30.61	142.13	18
Grain			---	26.43	3.23	23.20	---	13
All fruits and vegetables			252.98	---	---	72.30	180.68	29
Fresh fruits and vegetables			152.85	---	---	54.29	98.56	36
Fresh vegetables			72.34	---	---	21.57	50.77	30
Processed fruits and vegetables			100.13	---	---	18.01	82.12	18
Fats and oils			42.10	---	---	11.32	30.78	27
Miscellaneous products			46.58	---	---	7.75	38.83	17
			Cents	Cents	Cents	Cents	Cents	Percent
Beef (Choice grade)	2.25 lb. Choice grade cattle	Pound	81.0	49.4	4.1	45.3	35.7	56
Lamb (Choice grade)	2.37 lb. lamb	Pound	72.6	43.2	6.6	36.6	36.0	50
Pork (retail cuts)	2.13 lb. hogs	Pound	57.5	32.9	4.1	28.8	28.7	50
Butter	Cream and whole milk	Pound	75.0	---	---	54.6	20.4	73
Cheese, American process	Milk for American cheese	½ pound	36.3	---	---	14.7	21.6	40
Ice cream	Cream and milk	½ gallon	85.0	---	---	4/22.7	62.3	27
Milk, evaporated	Milk for evaporating	14-½ ounce can	15.4	---	---	6.3	9.1	41
Milk, fluid	Wholesale fluid milk	Quart	25.2	---	---	10.5	14.7	42
Chickens, frying, ready-to-cook	1.37 lb. broilers	Pound	40.1	---	---	20.0	20.1	50
Eggs	1.03 doz.	Dozen	52.8	---	---	35.0	17.8	66
Bread, white								
All ingredients	Wheat and other ingredients	Pound	21.6	---	---	3.1	18.5	14
Wheat	.882 lb. wheat	Pound	---	2.9	.4	2.5	---	12
Crackers, soda	1.38 lb. wheat	Pound	31.0	4.5	.6	3.9	27.1	13
Corn flakes	1.57 lb. white corn	12 ounces	28.3	3.2	.7	2.5	25.8	9
Corn meal	1.34 lb. white corn	Pound	14.4	2.8	.3	2.5	11.9	17
Flour, white	6.9 lb. wheat	5 pounds	57.0	22.3	2.6	19.7	37.3	35
Rolled oats	2.31 lb. oats	18 ounces	24.1	4.6	.7	3.9	20.2	16
Apples	1.08 lb. apples	Pound	17.2	---	---	6.0	11.2	35
Grapefruit	1.04 grapefruit	Each	17.5	---	---	4.7	12.8	27
Lemons	1.04 lb. lemons	Pound	23.5	---	---	6.2	17.3	26
Oranges	1.04 doz. oranges	Dozen	90.4	---	---	33.5	56.9	37
Beans, green	1.09 lb. snap beans	Pound	26.0	---	---	11.3	14.7	43
Cabbage	1.10 lb. cabbage	Pound	10.6	---	---	2.6	8.0	25
Carrots	1.06 lb. carrots	Pound	14.8	---	---	3.3	11.5	22
Celery	1.11 lb. celery	Pound	14.0	---	---	3.9	10.1	28
Lettuce	1.41 lb. lettuce	Head	19.4	---	---	6.1	13.3	31
Onions	1.06 lb. onions	Pound	11.4	---	---	3.5	7.9	31
Potatoes	10.42 lb. potatoes	10 pounds	65.1	---	---	17.1	48.0	26
Sweetpotatoes	1.12 lb. sweetpotatoes	Pound	13.9	---	---	4.5	9.4	32
Tomatoes	1.18 lb. tomatoes	Pound	32.2	---	---	10.4	21.8	32
Orange juice, canned	5.88 lb. Fla. oranges for canning	46 ounce can	53.2	---	---	9.6	43.6	18
Peaches, canned	1.89 lb. Calif. cling	No. 2-1/2 can	32.8	---	---	5.8	27.0	18
Beans with pork, canned	.35 lb. Mich. dry beans	16 ounce can	15.0	---	---	2.2	12.8	15
Corn, canned	2.49 lb. sweet corn	No. 303 can	19.2	---	---	2.4	16.8	12
Peas, canned	.69 lb. peas for canning	No. 303 can	22.6	---	---	2.9	19.7	13
Tomatoes, canned	1.84 lb. tomatoes for processing	No. 303 can	15.5	---	---	2.6	12.9	17
Orange juice concentrate, frozen	3.05 lb. Fla. oranges for frozen concentrated juice	6 ounce can	30.4	---	---	8.5	21.9	28
Strawberries, frozen	.51 lb. strawberries for processing	10 ounces	27.5	---	---	6.2	21.3	23
Beans, green, frozen	.71 lb. beans for processing	9 ounces	23.4	---	---	4.0	19.4	17
Peas, frozen	.70 lb. peas for freezing	10 ounces	21.0	---	---	3.0	18.0	14
Dried beans (navy)	1.00 lb. Mich. dry beans	Pound	17.8	---	---	6.4	11.4	36
Dried prunes	.97 lb. dried prunes	Pound	40.0	---	---	13.7	26.3	34
Margarine, colored	Soybeans, cottonseed and milk	Found	27.5	---	---	7.0	20.5	25
Peanut butter	1.77 lb. peanuts	Pound	57.7	---	---	20.1	37.6	35
Salad dressing	Cottonseed, soybeans, sugar, and eggs	Pint	38.1	---	---	6.6	31.5	17
Vegetable shortening	Soybeans and cottonseed	3 pounds	83.5	---	---	25.2	58.3	30
Corn sirup	1.90 lb. corn	24 ounces	28.7	3.7	.7	3.0	25.7	10
Sugar	38.05 lb. sugar beets	5 pounds	67.9	24.3	1.2	5/23.1	5/44.8	5/34

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ This estimate of the farmer's share does not allow for Government payments to producers.

4/ Farm value of cream and milk only.

5/ Net farm value adjusted for Government payments to producer was 27.2 cents, farm-retail spread adjusted for Government processor tax was 42.1 cents, and farmer's share of retail cost based on adjusted farm value was 40 percent.

Labor costs.--Employees of food marketing firms earned an average of $2.17 per hour last year, about 3 percent more than in 1962. The increase in 1963 was slightly smaller than in other recent years.

Food marketing employees' earnings are similar to those in related occupations. Employees in plants manufacturing food and kindred products averaged $2.31 per hour in 1963, compared with an average of $2.46 for all manufacturing employees. In retail food stores, earnings were $1.89 last year. This compared with an average of $1.80 in all retail trade. Hourly earnings of each of these employee groups in 1963 increased approximately 3 percent from 1962. In the wholesale food trade, employees earned $2.25 per hour, about 4 percent more than in 1962. Earnings averaged $2.45 for all wholesale trade, 3 percent higher than in 1962.

Changes in average hourly earnings are caused by changes in wage rates, in the number of hours of overtime work for which premium rates are paid, and in the proportion of employees in lower and higher paid groups. Part of the uptrend in average hourly earnings since World War II has resulted from an increasing proportion of food marketing employees in higher paid jobs.

Labor costs per unit of product marketed have not increased as much as hourly earnings because of increases in output of marketing services per man-hour (pp. 11-13). Unit labor costs rose 36 percent from 1947-49 to 1963, although hourly earnings, including fringe benefits, jumped 91 percent.

Capital costs.--Prices of new equipment averaged about the same in 1963 as in 1962, but construction costs edged up slightly (table 4).

New plant and equipment prices have risen 51 percent since 1947-49. This rise was a major cause of the threefold increase in food marketing firms' depreciation charges during this period (table 5). Another factor was the growth in the total value of depreciable assets through replacement, modernization, and extension of plant and equipment. Increases in depreciation rates per dollar of assets also helped boost total depreciation charges. Depreciation rates increased as a result of more rapid obsolesence, a decrease in the average service life of assets arising from increased investments in equipment relative to plant, and substitution of accelerated for straight-line depreciation.

Rental rates and the cost of other services increased about 2 percent from 1962 to 1963 (table 4). Total rent payments by food marketing firms quadrupled from 1947-49 to 1962 (latest available data) because of rising rental rates and more extensive use of leased plants and equipment (table 5).

Total interest paid by food marketing firms in 1962 was more than three times the 1947-49 average. This increase resulted from a rise in interest rates and growth in the volume of borrowed capital. Yields on high-grade corporate bonds rose by about three-fifths during this period, indicating that rates on new long-term loans rose by about the same rate (table 4). Rates on short-term bank loans to business in major cities in 1963 averaged twice those in 1947-49. Both short- and long-term rates were about the same in 1963 as in 1962.

Depreciation, rent, and interest each increased much more than the volume of farm food products marketed, which was 33 percent larger in 1962 than in 1947-49. Thus, capital costs per unit of product marketed increased.

Transportation charges.--In contrast to the trend in prices of other inputs used by food marketing firms, rail freight rates have moved down since 1958 (fig. 3). Rail

Table 4.--Prices of inputs bought by marketing firms, 1947-63

(1947-49=100)

Year and quarter	Intermediate goods and services					New plant and equipment 3/	Yields on high-grade long-term bonds, per annum 4/
	Total	Goods			Services 2/		
		Total 1/	Containers and packaging materials	Fuel, power, and light			
							Percent
1947-49	100	100	100	100	100	100	2.70
1950	106	104	105	100	109	108	2.62
1951	116	115	122	103	117	117	2.86
1952	116	114	118	102	121	119	2.96
1953	119	115	119	104	126	121	3.20
1954	120	116	120	104	127	122	2.90
1955	121	117	121	105	129	126	3.06
1956	127	122	129	109	134	134	3.36
1957	132	127	133	116	139	142	3.89
1958	134	128	135	112	144	145	3.79
1959	136	129	135	113	148	148	4.38
1960	138	130	137	116	151	149	4.41
1961	138	130	136	118	153	149	4.35
1962	139	129	137	117	155	150	4.33
1963	5/139	5/128	5/136	5/117	5/158	151	4.26
1962							
Jan.-Mar.	139	130	137	118	154	149	4.41
Apr.-June	138	129	138	116	155	150	4.30
July-Sept.	139	129	136	117	156	150	4.34
Oct.-Dec.	139	129	136	118	157	149	4.26
1963							
Jan.-Mar.	139	129	136	118	157	150	4.20
Apr.-June	139	128	135	116	158	150	4.22
July-Sept.	139	128	136	116	159	151	4.29
Oct.-Dec.	---	---	---	---	---	151	4.33

1/ Also includes prices of office supplies, restaurant supplies, and many other goods.
2/ Rent, property insurance and maintenance, telephone, etc.
3/ Weighted average of implicit price deflators for producers' durable equipment and new construction, other than nonfarm residential, gross national product, U.S. Dept. Commerce. Converted by ERS to 1947-49=100.
4/ Aaa corporate bonds; Moody's Investor Service.
5/ 3-quarter average.

Freight rates for agricultural commodities averaged the same in 1962 as in 1961 and 3 percent below the 1957-59 average (table 6). Reductions in rates on grains probably reduced the grain indexes further in 1963. Rate reductions have applied particularly to wheat and corn moving from major production areas to Atlantic and Pacific Coast ports. The rate decreases resulted from efforts of railroads servicing these ports to move grain east and west as well as to the Great Lakes and Gulf ports.

Table 5.--Selected costs of food marketing firms, by function of firms, 1947-49 average, 1961 and 1962 1/

Item	Processors			Wholesalers 2/		
	1947-49 average	1961	1962	1947-49 average	1961	1962
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
Advertising	387	1,071	1,115	53	104	106
Depreciation	281	861	897	54	220	223
Interest	53	143	148	17	61	62
Business taxes 3/	295	689	714	66	182	183
Rent	53	220	230	23	170	172
Repairs, bad debts, and contributions	275	526	549	31	115	117

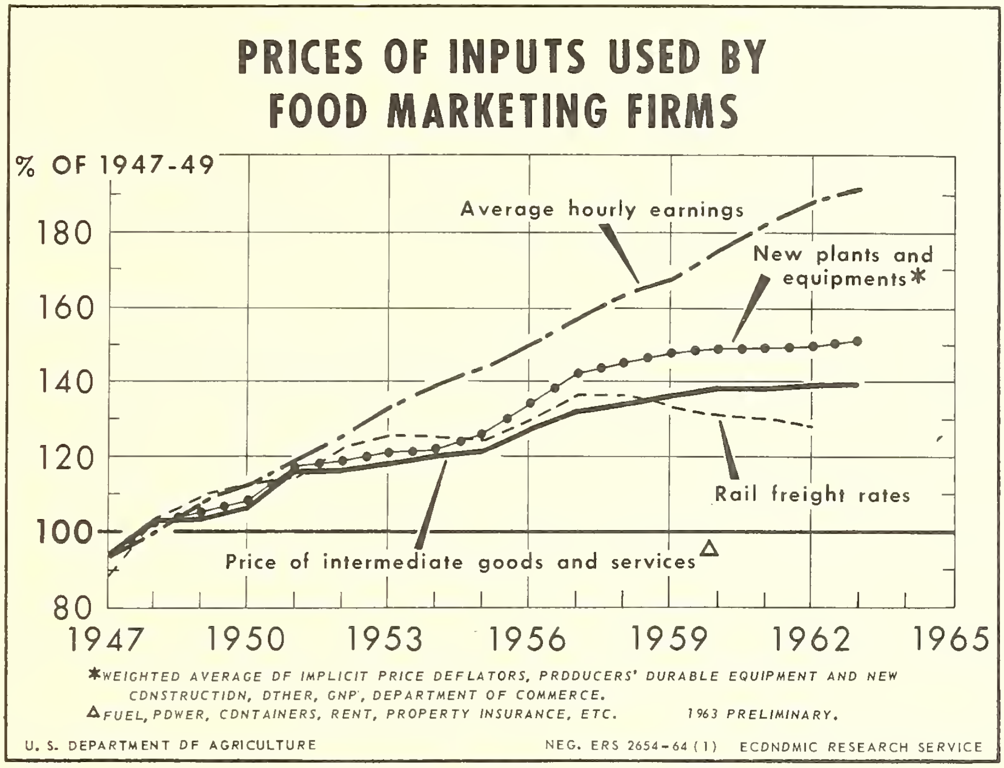
Item	Retailers 4/			All groups		
	1947-49 average	1961	1962	1947-49 average	1961	1962
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
Advertising	132	480	500	572	1,655	1,721
Depreciation	155	631	656	490	1,712	1,776
Interest	18	83	87	88	287	297
Business taxes 3/	165	588	612	526	1,459	1,509
Rent	200	748	781	276	1,138	1,183
Repairs, bad debts, and contributions	62	277	287	368	918	953

1/ Preliminary estimates. Estimates are for both corporate and noncorporate firms.
2/ Merchant wholesalers of groceries and related products.
3/ Includes property, social security, unemployment insurance, State income, and franchise taxes, license fees, etc., but does not include Federal income tax.
4/ Includes retail food stores; does not include restaurants and other eating places.

Estimates based on "Statistics of Income," Internal Revenue Service, and Census data.

Other costs.--Prices of most goods and services used by food marketing firms have been relatively stable in recent years, after rising steadily during much of the 1950's (table 4). However, some costs have continued to rise. State and local taxes in many areas are among the costs still climbing.

Advertising costs, one of the largest costs incurred by food marketing firms, increased from 1961 to 1962, the latest years for which data are available. The 1962 total was three times the 1947-49 average. Increases in media rates and more extensive advertising accounted for this rise. The introduction of many new products was one reason for more advertising.



*WEIGHTED AVERAGE OF IMPLICIT PRICE DEFLATORS, PRODUCERS' DURABLE EQUIPMENT AND NEW CONSTRUCTION, OTHER, GNP, DEPARTMENT OF COMMERCE.
△FUEL, POWER, CONTAINERS, RENT, PROPERTY INSURANCE, ETC. 1963 PRELIMINARY.

U. S. DEPARTMENT OF AGRICULTURE NEG. ERS 2654-64 (1) ECONOMIC RESEARCH SERVICE

Figure 3

Table 6.--Rail freight rate indexes for selected agricultural commodities, 1957-62 1/
(1957-59 = 100)

Year	Livestock	Meat	Fruits and vegetables	Wheat	All grains 2/
1957	96	109	102	98	98
1958	102	100	101	102	102
1959	102	91	97	100	100
1960	101	92	96	100	100
1961	101	92	96	99	99
1962	101	92	96	97	98

Year	Soybeans	Cotton	Wool	Tobacco	Combined index
1957	98	100	107	108	100
1958	102	101	108	102	102
1959	100	99	85	90	98
1960	101	97	82	90	98
1961	97	96	83	90	97
1962	95	96	83	91	97

1/ All indexes shown here are based on actual rates and changes reflect rate changes made by the railroads.
2/ Includes wheat.

Corporate profits.--Total profits after taxes of firms processing and distributing foods accounted for 2.3 percent of the total food marketing bill in 1962. (This figure does not include profits of unincorporated firms.) Profits after taxes of firms manufacturing food products total 3 percent more in the first 3 quarters of 1963 than in the like period of 1962, according to a joint report of the Federal Trade Commission and the Securities and Exchange Commission. But as a percentage of sales, after-tax profits averaged 2.2 percent in both years. The ratio of profits after taxes to stockholder equity averaged 8.8 percent in the first 3 quarters last year, compared with 8.9 percent in the same period of 1962.

Profits as a percentage of sales characteristically are lower for food manufacturing corporations than the average for all manufacturing corporations. As a percentage of stockholder equity, however, profits of food manufacturing companies are much closer to the average for all manufacturing companies. For example, after-tax profits of food manufacturers in 1962 averaged 2.2 percent of sales; those of all manufacturers averaged 4.5 percent. As a percentage of stockholder equity, after-tax profits averaged 9.2 percent for food manufacturers and 9.8 percent for all manufacturers. Sales per dollar of assets are larger for the food industry than for many manufacturing industries. Therefore, food manufacturers' ratio of profits to stockholder equity is much nearer the average for all manufacturers than is the ratio of profits to sales. Another reason for profit rates often being lower in the food industry is that risks are less than in many other industries, because demand is more stable for food than for the output of these other industries.

Profit ratios of leading corporations manufacturing food products have been higher in recent years than in the early 1950's, when they declined sharply (fig. 4). After-tax profits of 44 leading food manufacturing corporations averaged 2.4 percent of sales in

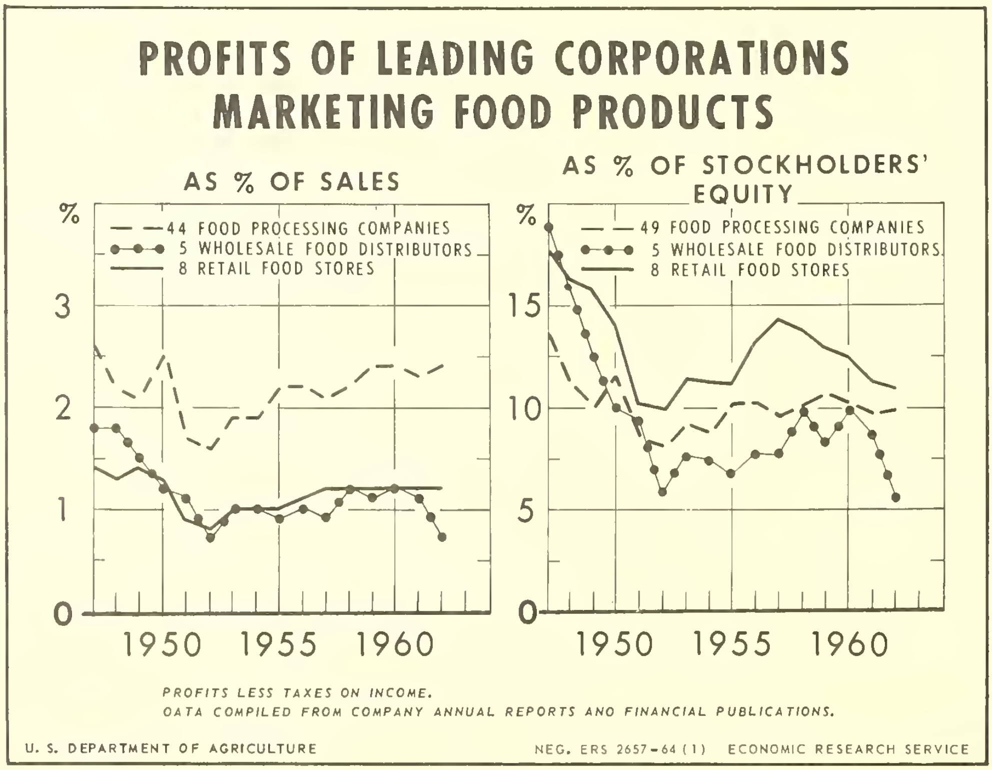


Figure 4

1960-62 compared with 1.9 in 1950-52 and 2.3 in 1947-49. After-tax profits of 49 leading food manufacturing corporations averaged 10.0 percent of stockholder equity in 1960-62 compared with 9.4 in 1950-52 and 11.7 in 1947-49. 2/ Year-to-year changes in profits before taxes followed a pattern similar to that of profits after taxes.

After-tax profits reported by a group of 16 leading retail food store chains totaled about 5 percent more in the first 9 months of 1963 than in the same period of 1962. The ratio of profits to sales, however, was 1.2 percent in both periods.

Profits data over a period of years have been compiled for 8 leading retail food chains. After-tax profits of these companies as a percentage of sales have been relatively stable, averaging 1.2 percent annually in 1957-62. The 1960-62 average of 1.2 percent compared with a 1950-52 average of 1.0 percent and 1.4 in 1947-49. As a percentage of stockholder equity, the after-tax profits of these chains averaged 11.6 percent in 1960-62 compared with 11.4 in 1950-52. However, this percentage has declined in recent years (fig. 4).

PRODUCTIVITY IN FOOD MARKETING INDUSTRIES

Charges for marketing farm-originated foods per unit of product marketed averaged 44 percent higher in 1963 than in 1947-49. 3/ This rise, however, was not as large as increases in employees' average hourly earnings, in prices of plant and equipment, and many other goods and services bought by food marketing firms. Gains in productivity kept unit marketing charges from rising as much as hourly earnings and prices of many other inputs.

Output of marketing services per man-hour--the most comprehensive measure of productivity available in marketing domestic farm food products--grew at an average rate of 2.6 percent per year during 1947-63. This growth rate was about the same as the rate in the nonfarm sector of the economy. Output of marketing services increased at about the same annual rate as output per man-hour; total man-hours worked changed little from 1947 to 1963. The output of marketing services grew because of both expansion in the quantity of products marketed and increases in services per unit of product. 4/

Output per man-hour in the food manufacturing industries rose 3 percent per year from 1947 to 1963 (fig. 5). The effect on food marketing costs of this relatively rapid growth was partly offset by a slower growth rate in the nonmanufacturing (or food distribution) sector of the food marketing system. No direct measure of output per man-hour is available for the food distribution sector; however, "residual estimates" indicate that output per man-hour in this sector climbed about 2.0 percent per year from 1947 to 1963.

2/ This group of corporations includes the 4 corporations for which profits-to-sales ratios were given. Among the 49 corporations are 5 for which sales data are not available.

3/ The rise in unit marketing charges is measured by the increase in the farm-retail spread of the farm food market basket (table 3).

4/ Because of data problems, the index of output of marketing services probably does not fully take into account the secular increase in marketing services per unit. Thus, estimates of the rate of growth in output per man-hour probably are conservative.

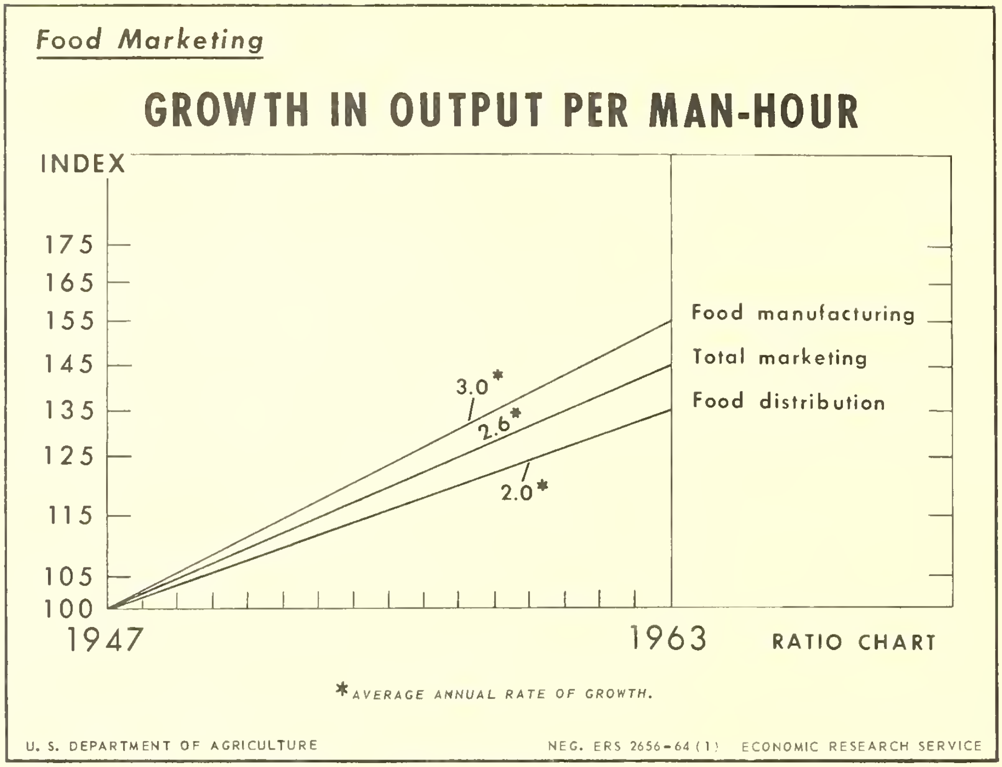


Figure 5

The rate of increase in output per man-hour was less than half as large in food marketing as in farming (5.6 percent) during 1947-63. 5/

Factors affecting output per man-hour.--Technological improvements probably were most important in causing the growth in output per man-hour. Among the many technological advances by food marketing firms were the substitution of continuous processes for batch methods, improvements in plant layout and in materials handling, electronic temperature and humidity controls, and automatic grading and packaging. Also contributing to the growth were continued expansion in the output of frozen foods, flour mixes, and other relatively new products for which output per man-hour was either larger or increasing more rapidly than the average rate in food manufacturing. There is little doubt that the rise of self-service supermarkets resulted in large gains in retailing services per man-hour.

Improvements in the quality of labor and management added much to the growth in output per man-hour. Quality of these inputs was enhanced by education, training, experience, and other kinds of investment in human resources. The number of engineers, technicians, and other highly trained workers employed by food marketing firms has grown significantly.

5/ These estimates are based on the same concepts of output and employment. The rate for agriculture was calculated from output per man-hour indexes published in the "Economic Report of the President," January 1964, p. 245.

Economies of scale in processing and distributing farm-originated products also have contributed to the growth in output per man-hour.

Unit labor costs.--Gains in output per man-hour in the food marketing industries have kept unit labor costs from rising as much as hourly earnings of employees--the only input "price" that can be compared directly with output per man-hour. Labor costs per unit of product marketed were about 50 percent higher in 1963 than in 1947, although average hourly earnings (including fringe benefits) were more than twice as high in 1963 (fig. 6).

Part of the improvement in output per man-hour resulted from the substitution of machines and other forms of capital for labor. Thus, part of the savings in labor costs made by greater output per man-hour has been offset by increased capital costs.

SPECIAL STUDIES OF MARKETING SPREADS AND COSTS

The Marketing Economics Division made several special studies of marketing spreads and costs last year. In several of these studies, prices and costs were collected for individual products sold in specific markets. From these data, the Division estimated how marketing spreads for these products were divided among the various marketing agencies. The results of these studies have been widely disseminated to improve public understanding of marketing functions and costs and the factors affecting food prices and to help find ways to reduce marketing costs.

Some results for individual products are presented in the following pages.

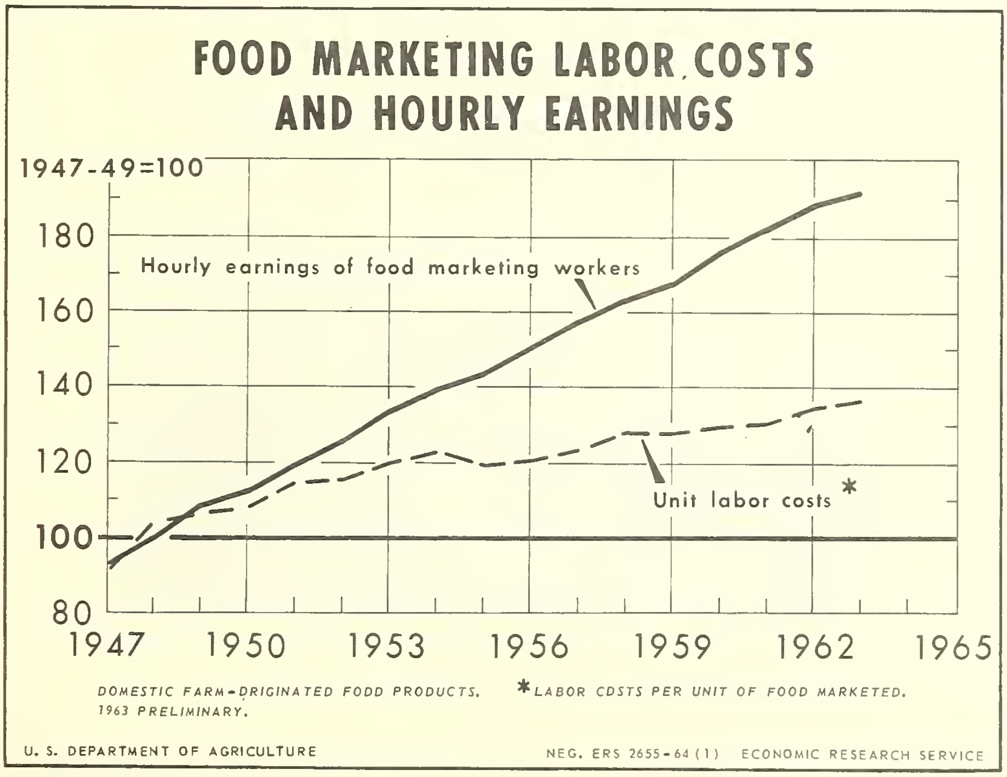


Figure 6

Livestock Products

Beef.--Retail prices of beef and prices farmers received for beef cattle declined sharply early in 1963 in response to increased production. Beef production in 1963 was about 7 percent larger than in 1962. As frequently happens, the retail price changed less than the farm price. Consumers paid an average of 81.0 cents per pound for Choice beef in 1963, 1.4 cents less than in 1962. The farm value of beef, however, dropped to 45.3 cents, 6.5 cents below 1962. Because of the larger decrease in the farm value, the farm-retail spread increased 5.1 cents or 17 percent. The 1963 spread was 3.5 cents larger than the previous record high in 1961. Both the farm-wholesale and wholesale-retail segments of the total farm-retail spread increased.

Movements in the retail price, farm value, and spread in 1963 were opposite to those in 1962. In the earlier year, both the retail price and farm value increased, but as usual the retail price changed less than the farm value. The larger increase in the farm value in 1962 caused the spread to decrease.

Most of the increase in the spread in 1963 was in the first quarter, when the farm value dropped rapidly and the retail price lagged (fig. 7). In the second quarter, the farm value declined less than the retail price, which was relatively stable the rest of the year. The farm value rose more than seasonally in the third quarter and declined more than seasonally in the fourth.

The farmer's share of the consumer's dollar spent for beef declined to 56 cents in 1963 from 63 cents in 1962. This was the smallest share received since 1939. The decrease resulted partly from an increase in the farm-retail spread and partly from a decline in prices farmers received for beef cattle.

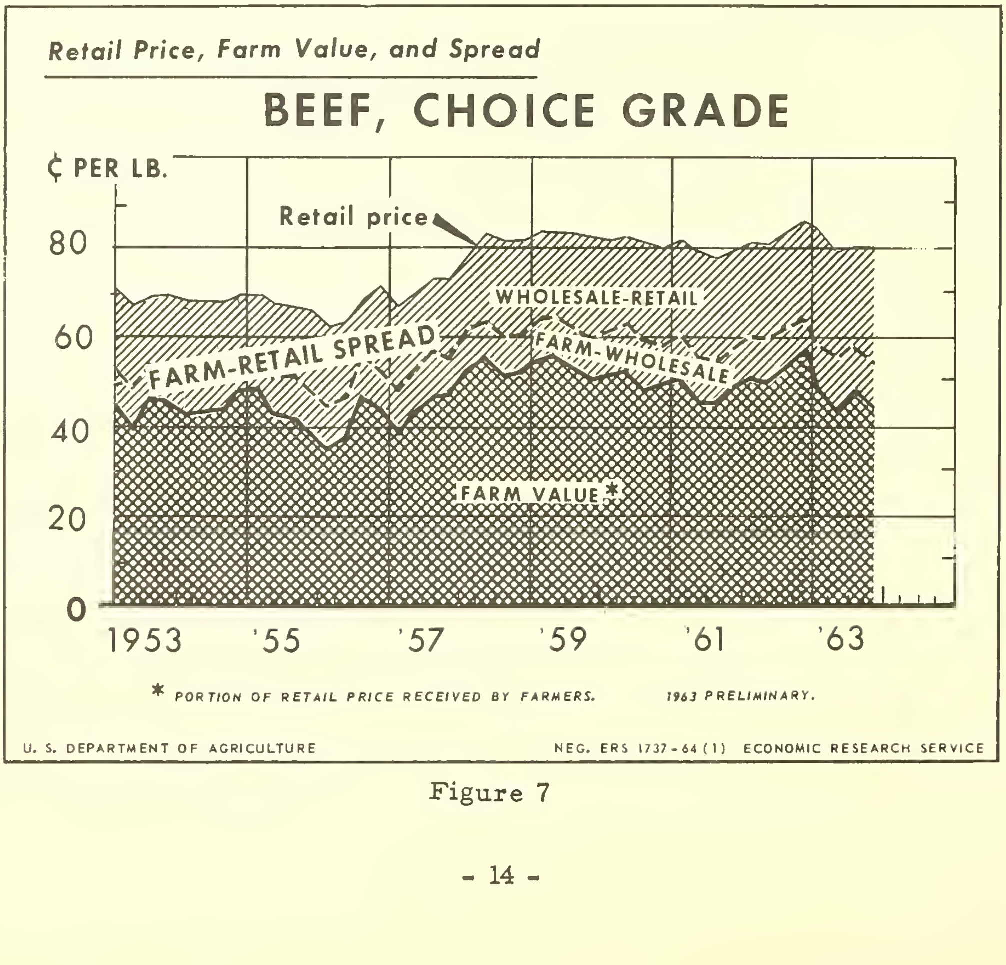


Figure 7

Pork.--After 2 years of fairly stable prices, the retail price, wholesale value, and net farm value of pork averaged lower in 1963 than in 1962. This downward movement was similar to that for beef. Commercial pork production was 6 percent larger in 1963 than in 1962.

The farm-retail spread for pork increased about 2 percent from 1962 to 1963 (fig. 8). The annual average spread of 28.7 cents per retail pound in 1963 was the second largest ever recorded. Most of the increase was in the wholesale-retail segment.

The farmer's share of the consumer's dollar spent on pork decreased to 50 cents in 1963 from 53 cents a year earlier.

Hides and Leather.--Hides account for a significant part of the byproduct value of beef cattle. Lower hide prices likely result in lower prices packers pay for livestock, although changes in hide prices have little effect on prices of leather products to consumers. Prices packers received for hides in 1963 declined to the lowest level in 25 years. Average prices for heavy native steer hides, Chicago, fell from 15 cents a pound in 1962 to 11 cents in 1963 (table 7). Prices for most other hides declined similarly.

Hide buyers placed more emphasis on quality during 1963, and many hide dealers had difficulty moving poor quality hides at any price. This was especially true of firms marketing country-locker-plant or butcher hides. Many packers and dealers reported throwing No. 3 hides into rendering tanks.

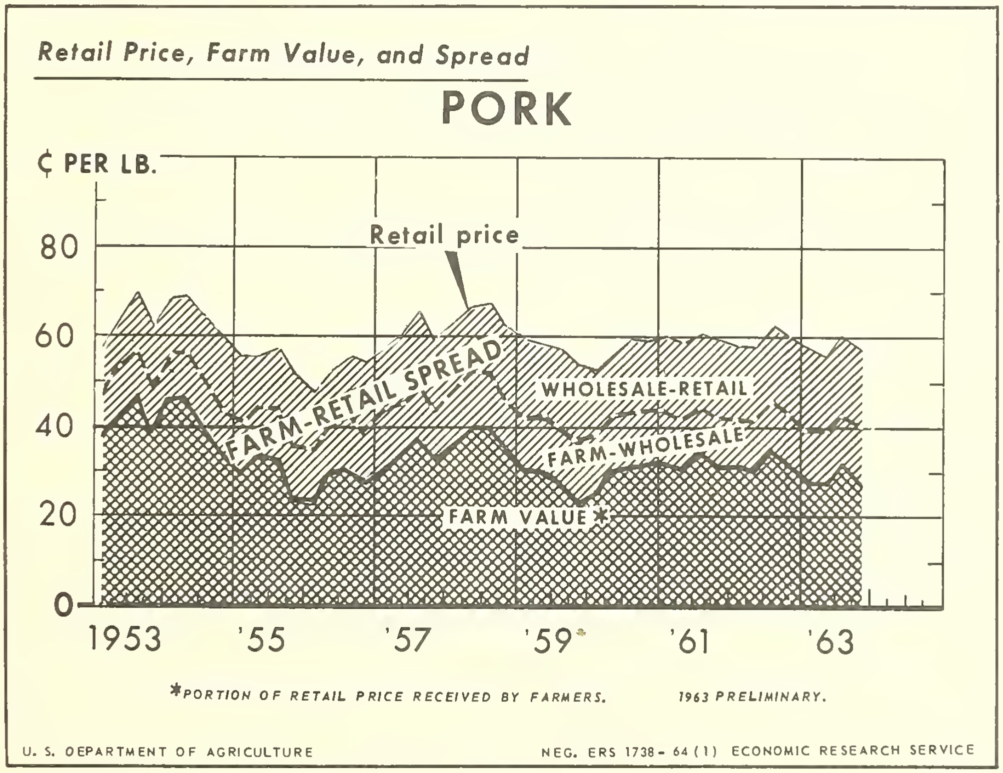


Figure 8

Table 7.--Selected hide and leather statistics, 1962 and 1963

Item	Unit	1962	1963	Change
				Percent
Cattle slaughter	Million head	27.0	28.1	4.1
Hide exports	1,000 pieces	6,587	1/8,000	18
Hide prices (Chicago) per lb.				
Light native cows	Cent	18.5	12.8	-31
Country hides--extremes	Do.	13.5	9.0	-33
Heavy native steers	Do.	15.1	11.1	-27
Calfskins under 9½ pounds	Do.	57.6	33.0	-43
Kips	Do.	47.8	30.2	-37
Prices, wholesale (1957-59 = 100):				
Hides	Index	106.2	2/84.7	-20
Leather	Do.	108.5	2/102.1	-6
Leather footwear	Do.	108.7	2/108.0	0
Leather shoes:				
Production	Million pair	598	3/598	0
Per capita consumption	Do.	3.20	3/3.16	-1.2

1/ Estimated by Economic Research Service.
2/ Bureau of Labor Statistics, 11-month average.
3/ Tanners Council estimates.

The drop in hide prices only slightly affected finished leather prices, and had almost no effect on leather footwear prices. The index of hide and skin prices (1957-59 base) fell 21 points--from 106 in 1962 to 85 in 1963--while the finished leather price index fell 6 points (table 7). Indexes of leather footwear prices remained almost constant at 108 in 1962 and 1963.

The decline in hide prices did not cause lower retail prices for leather products. The value of hides and skins at the packinghouse level is less than 4 percent of the retail value of leather products. Thus, large changes in prices of hides and skins have little effect on retail leather prices.

A dominant factor contributing to depressed hide prices in 1963 was the 4-percent increase in cattle slaughter, while demand for leather for use in shoes remained almost unchanged.

Most of this imbalance in the supply-demand situation, which began in 1952 resulted from the increasing per capita consumption of meat and declining per capita purchases of leather shoes, in which over 80 percent of finished leather is used. During 1952-63, per capita consumption of beef increased more than 50 percent while purchases of leather shoes fell from 3.4 pairs per person to less than 3.2. However, most of excess hide supplies were exported. Exports of 8 million pieces in 1963 represented about 28 percent of total cattle slaughter. Expansion of exports may be the best way to bring an upturn in hide prices.

Poultry and Eggs

Eggs.--Prices of Grade A large eggs in 10 major U.S. cities increased from 1962 to 1963 at all market levels, with the largest increase at the farm level. These increases contrasted with decreases in the 2 preceding years. Retail prices in 1963 increased 1 percent, while farm prices rose more than 3 percent. The higher prices resulted from a relatively smaller increase in available egg supplies than in the population.

Farm-retail spreads for Grade A large eggs in the 10 cities averaged 23.7 cents a dozen in 1963--down 0.5 cent from 1962 (fig. 9). Most of the decrease resulted from a smaller spread between the price received by farmers and that paid by retailers (the farmer-retailer spread). This spread narrowed in 6 of the 10 cities, was the same in 1, and widened in 3. Retail store spreads averaged 10.2 cents in 1963--0.1 cent smaller than in 1962. Farm-retailer spreads averaged 13.5 cents in 1963--0.4 cent less than in 1962. Cleveland had the biggest change in retail store spreads among the 10 cities--0.9 cent a dozen wider in 1963 than in the previous year.

Frying chickens.--Prices for Grade A ready-to-cook frying chickens declined at all market levels in 10 major cities from 1962 to 1963. The retail price averaged 39.9 cents per pound in 1963 compared with 40.5 cents in 1962 (fig. 10). Prices at other market levels declined more. The lower prices resulted from large increases in available supplies from a year earlier. Production of fryers increased 4 percent in 1963, the volume of exports and USDA purchases for the School Lunch Program declined, and the U.S. population increased 1.5 percent.

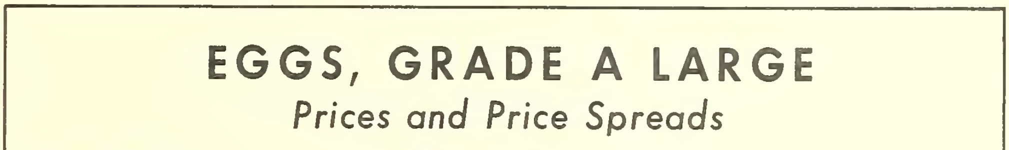


Figure 9

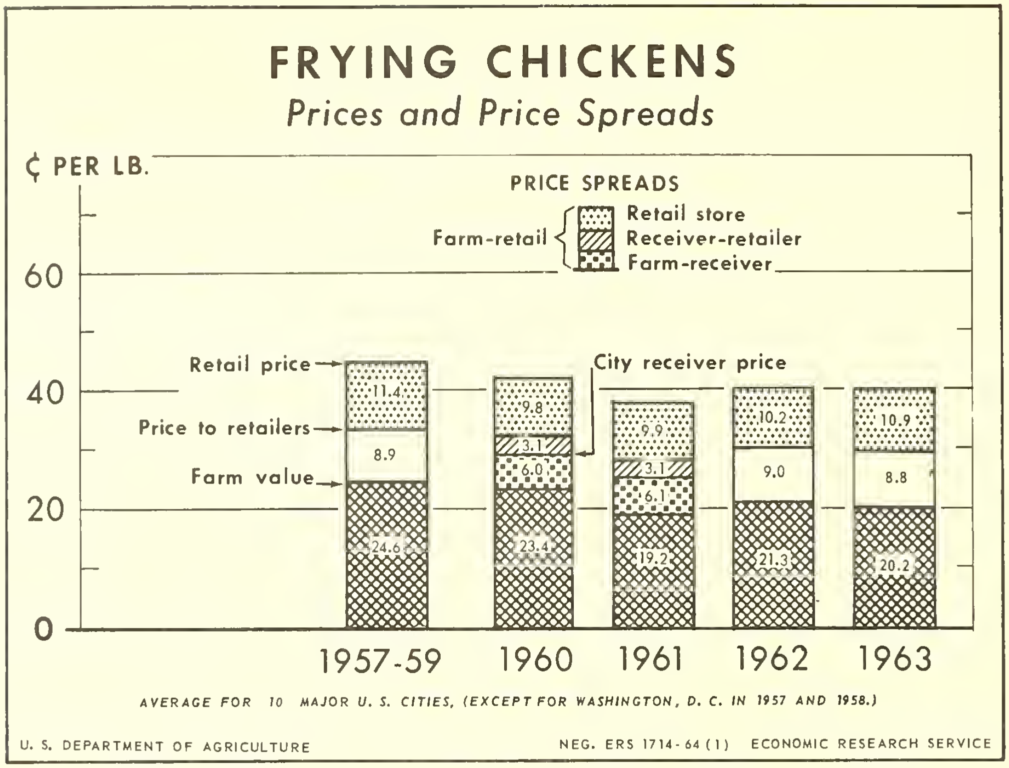


Figure 10

Farm-retail price spreads widened in 7 of the 10 cities in 1963 and averaged 19.7 cents a pound--0.5 cent wider than in 1962. Most of the widening was attributed to wider retail store spreads, since the farm-retailer spreads narrowed in most cities.

Turkeys.--October-December prices of Grade A ready-to-cook medium-size turkeys in 5 major cities generally were nearly the same in 1963 as in 1962 at all market levels except retail. The retail selling price rose slightly.

Farm-retail spreads averaged 18.3 cents a pound in 1963--0.6 cent wider than in 1962 (fig. 11). Wider retail store spreads accounted for most of the increase. Retailers' spreads in 1963 averaged 8.4 cents for the 5 cities--0.7 cent more than in 1962. Farm-retailer spreads averaged 9.9 cents in 1963--0.1 cent less than in 1962.

Dairy Products

Fluid milk.--The farm-retail spread for fluid milk averaged about the same in 1963 as in the preceding year, but both the retail price and farm value declined (fig. 12). The retail price averaged 25.2 cents per quart in 1963, down 0.1 cent, and the farm value averaged 10.5 cents, down 0.2 cent from 1962. Farmers received 42 percent of the retail price in both years. The decline in the farm value probably resulted mainly from increases in supplies of milk eligible for fluid use. In many market areas supply increased more than demand, causing weakness in the Class I price. Many Federal order markets have supply-demand adjustment factors in formulas used to establish Class I prices.

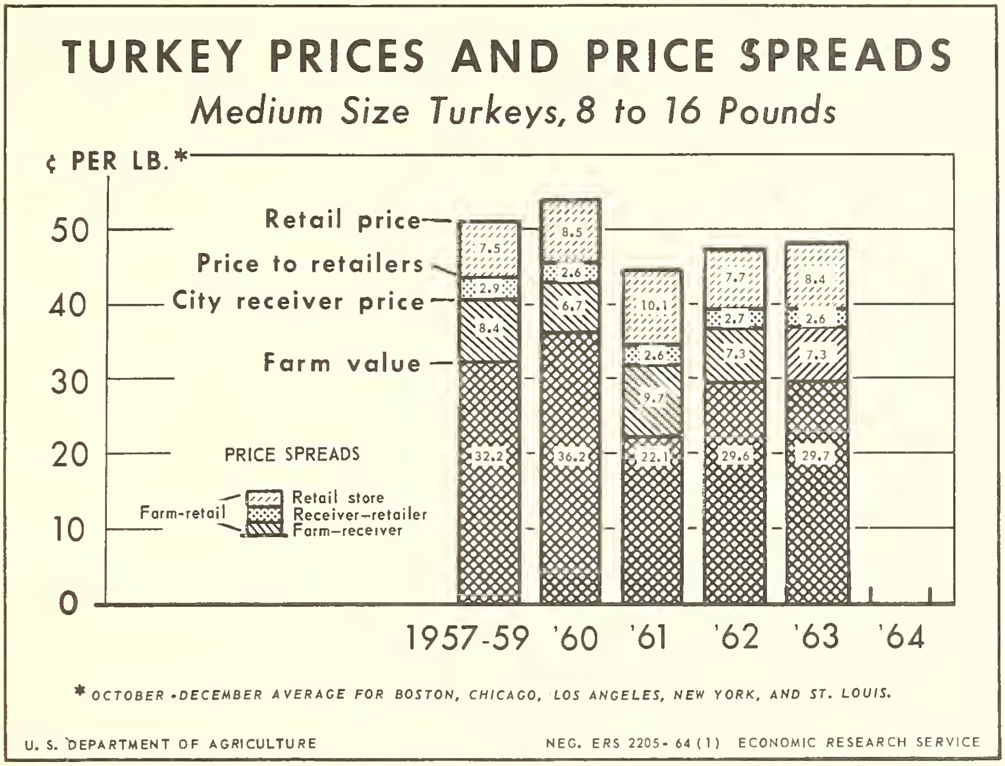


Figure 11

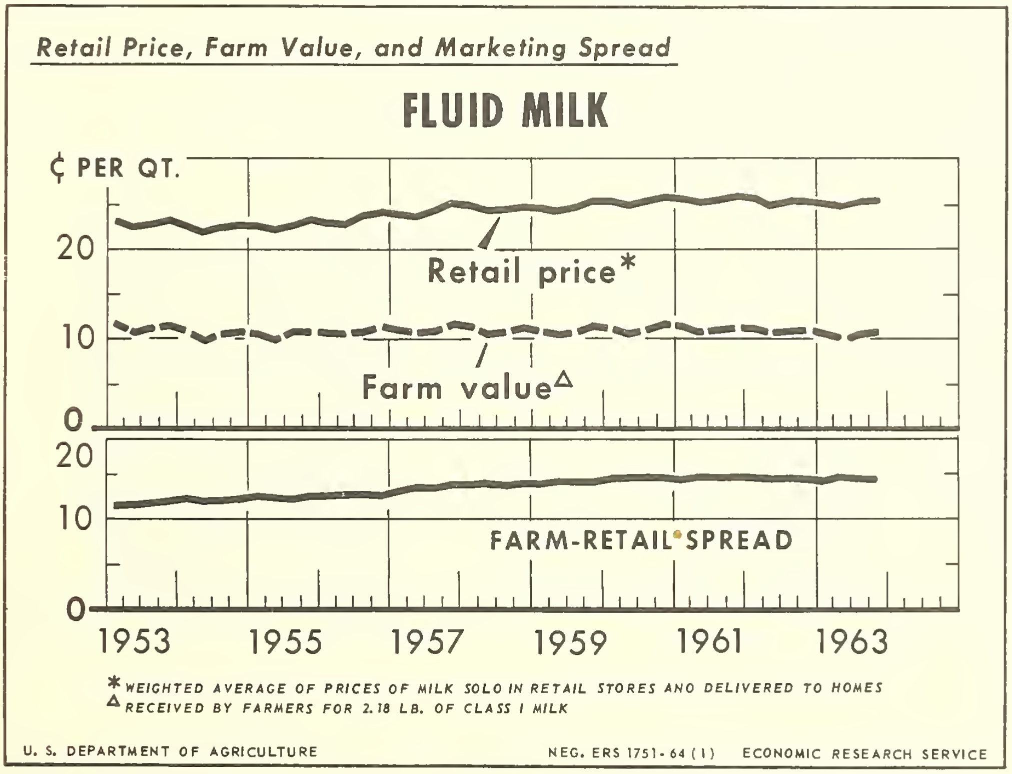


Figure 12

Manufactured products.--Retail prices and farm-retail spreads of manufactured dairy products generally declined slightly in 1963 from 1962. Farm values of these products, however, were a little higher than in 1962. Consequently, the farmer's share of retail prices of most manufactured products increased slightly. The situation in 1963 differed somewhat from that in 1962. A reduction in USDA's support prices for milk and butterfat in 1962 was accompanied by a decrease in farm values and retail prices of these products, with higher farm-retail spreads for most products and lower farmers' shares.

Milk production in 1963 was slightly below the record output in the preceding year, but the volume used for fluid milk and cream was up slightly.

Bread

Retail prices of bread in 1963 continued a long-term increase and the farmer's share of the bread dollar continued a long-term decline (fig. 13).

Each year since 1947-49, consumers have paid more for bread than in the preceding year. In 1963, the average retail price of a 1-pound loaf of white bread reached an alltime high of 21.6 cents, up 0.4 cent from 1962 and up 8.1 cents from 1947-49. The continued price rise for white bread has been due entirely to the steady rise in marketing charges; the farm value of the ingredients in bread has remained relatively stable. In 1963, transporation, processing, and distribution agencies received 18.5 cents for their services for each 1-pound loaf of white bread sold in the retail store. They received 10.2 cents per pound in 1947-49, when retail prices averaged 13.5 cents.

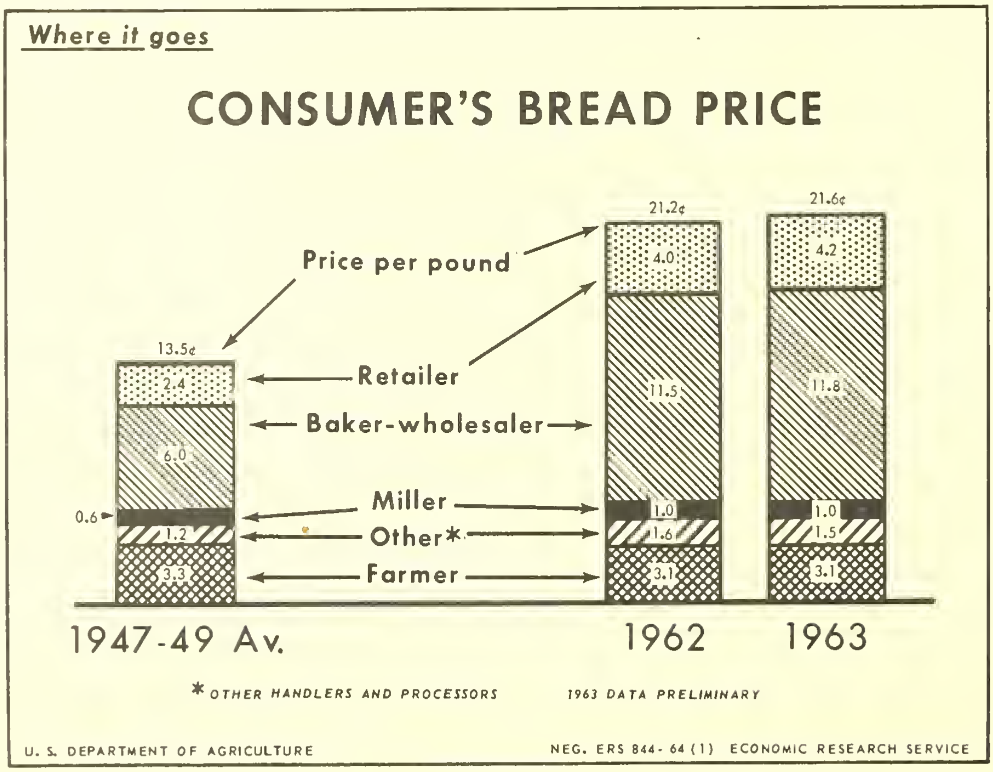


Figure 13

Since the farm value of bread ingredients remained relatively stable during the last 15 years, the continued increase in the farm-retail spread reduced the farmer's share of the retail bread dollar from 24 percent in 1947-49 to 14 percent in 1963. The farm value of a 1-pound loaf of bread was 3.1 cents in 1963, down from 3.3 cents in 1947-49.

Wholesale bakers receive a large proportion of the retail price of bread, because resources needed to convert flour into bread and distribute it are much greater than those needed to produce wheat or flour. Wholesale bakers in 1963 received a gross spread of 11.8 cents per each 1-pound loaf. Of this amount, 11.5 cents was the cost of converting flour into bread and distributing the product. This left about one-third of a cent profit to the wholesale baker. In 1947-49, wholesale bakers received a gross spread of 6.0 cents for the same services as in 1963, and their net profit was slightly higher than in 1963.

Gains in employee productivity in the wholesale baking industry since World War II have been among the smallest in the food manufacturing industries. The rise of nearly 100 percent in the wholesale baker's gross spread is attributed mainly to the high cost of distributing bread. The system was developed many years ago to serve the needs of the small retail grocery stores. With this decline and the emergence of large supermarkets, the wholesale delivery system has become largely obsolete.

Fruits and Vegetables

Oranges.--Retail prices of fresh oranges and processed orange products rose sharply in 1963, because freezing weather in Florida reduced supplies. Prices growers received for oranges used for processing, however, rose much more slowly than retail prices, causing a big increase in farm-retail spreads.

Retail prices of fresh oranges rose rapidly in early 1963, following a December 1962 freeze in Florida and a January freeze in California. Prices for 1963 averaged 90.4 cents per dozen, 11.1 cents more than in 1962 (table 8). Most of the increase went to the growers. The farm value was up 40 percent from 1962 and the spread increased 3 percent.

Table 8.--Oranges and orange juice: Retail price, farm value, farm-retail spread, and farmer's share of retail price, 1962 and 1963

Item	Oranges, fresh per dozen		Orange juice, canned per 46-oz. can		Orange juice, frozen concentrate, per 6-oz. can	
	1962	1963	1962	1963	1962	1963
	Cents	Cents	Cents	Cents	Cents	Cents
Retail price	79.3	90.4	42.5	53.2	20.9	30.4
Farm value	23.9	33.5	12.7	9.6	8.4	8.5
Spread	55.4	56.9	29.8	43.6	12.5	21.9
	Percent	Percent	Percent	Percent	Percent	Percent
Farmer's share	30	37	30	18	40	28

Retail prices of frozen orange concentrate and canned orange juice went up immediately after the freeze in Florida in anticipation of a substantial reduction in the volume of these products to be processed from the 1962-63 crop. Price increases moderated after the first quarter but continued upward the rest of the year. Retail prices of frozen concentrate and canned juice in 1963 averaged 45 percent and 25 percent higher, respectively, than in 1962.

Early in the 1962-63 season, prices growers received for processing oranges were lower than a year earlier because of large carryover stocks of processed orange products and an expected large volume of processing oranges from the new crop. After the freeze large quantities of freeze-damaged oranges were offered to processors, keeping prices down. Prices rose sharply later in the year, but growers sold much of the 1962-63 crop when prices were lower, or little higher, than a year earlier.

Growers received lower prices per box for freeze-damaged oranges than for those escaping injury because the damaged oranges yielded less juice. The farm values of frozen concentrate and canned orange juice in 1963 were based mainly on prices growers received for the Florida 1962-63 crop. The farm value of frozen concentrate was 1 percent higher and the farm value of canned juice was 24 percent lower in 1963 than in 1962.

As a result of these divergent movements in retail prices and farm values, the farm-retail spreads of frozen concentrate and canned juices were 75 and 46 percent wider, respectively, in 1963 than in 1962. Marketing spreads for both products were considerably wider in 1963 than in 1958, which also followed a severe freeze in Florida. These spreads narrowed after 1958 but not to the extent they had widened during 1958.

Margins and grower-packer returns for lettuce.--Retail store spreads for lettuce are relatively small as a percentage of retail price. During the 5 seasons, 1957-58 to 1961-62, they ranged from 15 to 25 percent of the retail price in Atlanta, from 16 to 26 percent in Chicago and from 12 to 23 percent in New York City (table 9). These compare with an average of about 30 percent for all fresh vegetables. The smaller spread for lettuce is possibly related to its widespread use and relatively elastic demand, which enables retailers to attract customers by adjusting prices.

The shipping point-retailer spread, which is primarily for transportation and wholesaling, ranged from 38 to 40 percent of the retail price for lettuce sold in Atlanta, from 33 to 45 percent in Chicago, and from 41 to 49 percent in New York City. The major portion of this margin--around $1.25 per crate, depending on shipping distance--went to transportation. The remaining portion was received by packers and growers and ranged from a low of 34 percent of the retail price for lettuce sold in New York City in 1960-61 to a high of 46 percent for lettuce sold in Atlanta in 1957-58.

Margins and grower-packer returns for onions.--Retail store spreads for onions, measured as a percentage of retail price, are among the highest of all vegetables. In 5 seasons, 1957-58 to 1961-62, they ranged from 40 percent of the retail price in New York City in 1958-59 to 65 percent of the retail price in Chicago in 1960-61 (table 10). Retail margins averaged more than half of the retail price during 4 of the 5 seasons in Atlanta and Chicago and 3 of 5 seasons in New York City. Large retail margins may be partly explained by the relative insensitiveness of onion consumption to price changes. Consequently, retailers have little incentive to vary prices through adjustments in spreads.

Table 9.--Lettuce, Iceburg: Retail price per crate of 24 heads, marketing spreads, and grower-packer returns, Atlanta, Chicago, and New York City, 1957-58 to 1961-62

Season and city	Retail price	Marketing spreads				Grower-packer returns	
		Retail store		Shipping point-retailer			
	Dollars	Dollars	Percent 1/	Dollars	Percent 1/	Dollars	Percent 1/
Atlanta:							
1957-58.....	4.04	0.63	16	1.53	38	1.88	46
1958-59.....	3.73	.79	21	1.41	38	1.53	41
1959-60.....	4.11	.62	15	1.65	40	1.84	45
1960-61.....	3.64	.90	25	1.39	38	1.35	37
1961-62.....	3.82	.84	22	1.49	39	1.49	39
Chicago:							
1957-58.....	4.27	.69	16	1.94	45	1.64	39
1958-59.....	3.83	.99	26	1.28	33	1.56	41
1959-60.....	4.15	.82	20	1.45	35	1.88	45
1960-61.....	3.70	.87	24	1.49	40	1.34	36
1961-62.....	3.83	.85	22	1.49	39	1.49	39
New York City:							
1957-58.....	4.46	.54	12	2.05	46	1.87	42
1958-59.....	4.03	.63	16	1.84	46	1.56	38
1959-60.....	4.62	.76	16	1.94	42	1.92	42
1960-61.....	4.08	.70	17	2.00	49	1.38	34
1961-62.....	4.28	.98	23	1.74	41	1.56	36

1/ Percentage of retail price.

The shipping point-retailer spreads ranged from 7 to 14 percent of the retail price for onions sold in Atlanta, 8 to 11 percent in Chicago, and 5 to 15 percent in New York City. One reason for the small size of these spreads is that many onions are grown near the markets, so transportation charges are minor. The portion of the retail price remaining for packers and growers ranged from 25 to 39 percent for onions sold in Atlanta, from 25 to 44 percent in Chicago, and from 30 to 52 percent in New York City.

Sugar

The recent increases in retail prices for sugar have been a major concern of household consumers, food processors, sugar marketing organizations, and Government agencies concerned with sugar programs. Retail prices in the United States following World War II inched upward from about 50 cents per 5-pound bag in 1950 to 55 cents in 1957, and 60 cents in April 1963. Just 2 months later, in June 1963, consumers were paying 84 cents per bag. During the succeeding 4 months, prices declined substantially but moved upward again in November. The December price averaged 72.4 cents per bag.

Table 10.--Onions, dry, yellow: Retail price, spreads and grower-packer returns per 50-pound sack, Atlanta, Chicago, and New York City, 1957-58 to 1961-62

Season and city	Retail price	Marketing spreads				Grower-packer returns	
		Retail store		Shipping point-retailer			
	Dollars	Dollars	Percent 1/	Dollars	Percent 1/	Dollars	Percent 1/
Atlanta:							
1957-58.....	4.74	2.48	52	0.67	14	1.59	34
1958-59.....	5.90	2.87	49	.84	14	2.19	37
1959-60.....	4.45	2.73	61	.61	14	1.11	25
1960-61.....	4.73	3.02	64	.47	10	1.24	26
1961-62.....	6.21	3.33	54	.45	7	2.43	39
Chicago:							
1957-58.....	4.91	2.62	53	.55	11	1.74	36
1958-59.....	6.66	3.00	45	.76	11	2.90	44
1959-60.....	4.35	2.79	64	.48	11	1.08	25
1960-61.....	4.61	2.99	65	.41	9	1.21	26
1961-62.....	6.38	3.35	53	.51	8	2.52	39
New York City:							
1957-58.....	3.84	1.59	42	.59	15	1.66	43
1958-59.....	5.04	2.05	40	.38	8	2.61	52
1959-60.....	3.48	2.07	59	.30	9	1.11	32
1960-61.....	3.83	2.42	63	.26	7	1.15	30
1961-62.....	4.99	2.54	51	.24	5	2.21	44

1/ Percentage of retail price.

Almost 45 percent of the sugar consumed in the United States came from foreign sources in 1962 and 1963. World production of sugar declined in 1961 and 1962 and recovered only partially in 1963. World consumption has exceeded production since 1960. This gap has been filled by a reduction in world sugar stocks. Increases in world market prices of raw sugar became noticeable as early as August 1962. By February 1963, world prices exceeded the equivalent level in the United States and they have remained above that level. Prices duty paid for imported raw sugar at New York rose from an average of about 7.0 cents per pound in March 1963 to 11.1 cents in May. The December price averaged about 8.8 cents per pound compared with a world price of 10.4 cents.

Farmers are paid for sugar beets and sugar cane on a crop-year basis. The methods of determining these prices differ slightly among the various producing areas of the United States, but in all cases the price of the crop is related to the price received for sugar. The average payment for the beet equivalent of 5 pounds of granulated sugar was 23.1 cents in 1963 compared with 21.3 in 1962. Cane growers received 24.2 cents in 1963 and 21.1 in 1962. Since growers are paid on a crop-year basis, their returns do not vary from month to month except at the beginning of a new crop year. Sugar beets and sugar cane are processed as harvested. Consequently, the full effect of the higher prices for sugar will not be realized by farmers until the sugar from their 1963 crops is sold, most of it in 1964.

The above farm values have been adjusted for byproduct values but do not include Government payments to growers. In 1962 and 1963 payments to cane growers averaged 3.2 cents per 5-pound bag of refined sugar. Beet growers received 4.3 cents in 1962 and 4.1 in 1963.

Because returns to farmers for beets and cane are determined annually, the variation in retail prices for sugar during the year 1963 was reflected in the farm-retail price spread. The difference between the retail price and the farm value of the beet equivalent of a 5-pound bag of granulated sugar averaged 44.8 cents in 1963, an increase of 7.6 cents above the 1962 average of 37.2. The average farm-retail spread for cane sugar increased to 43.7 cents in 1963 from 37.5 in 1962. Farm-retail spreads include the excise tax on sugar.

Cotton Clothing and Household Articles

The farm value of cotton used in making a typical group of apparel and household items averaged 32 cents per pound in 1963. This was 1 cent less than that for 1962 and within 10 percent of the values prevailing throughout the past decade. The retail cost and farm-retail spread rose slightly but about equaled the averages of the last 5 years (table 11). The proportion of domestic fiber consumption accounted for by cotton continued to fall. The small increase in cotton exports during 1963 was more than offset by a decline in domestic mill consumption, and total disappearance fell slightly.

The farmer's share of the consumer's dollar averaged 15 percent for all cotton goods in 1963; but for some individual items, the farmer's share varied markedly from the average. For example, the farmer received 7 percent of the average retail price of $4.27 for a business shirt, which uses less than a pound of cotton but requires considerable labor in fabrication. In contrast, the farmer received 32 percent of the $2.25 spent by the consumer for a sheet, which uses more than 2 pounds of cotton but requires little labor in fabrication.

Preliminary reports indicate that charges for ginning and wrapping cotton will average slightly higher in 1963-64 than the average of $17.08 per bale in 1962-63. The charge for ginning and wrapping currently accounts for about 11 percent of the farm value of cotton compared with 7 percent 10 years ago. The absolute and relative increase in this charge results from added costs of installing and operating more cleaning and conditioning equipment, which is needed to handle the increasing volumes of roughly harvested cotton, as well as increased costs for labor, power, and other inputs.

Costs of warehousing, merchandising, and transporting cotton have varied little over the past decade; they totaled about the same in 1963 as in the preceding year. Rising labor costs in warehousing have been offset to a considerable extent by substitution of mechanical equipment and an accompanying increase in labor productivity. The relative stability in the price of cotton has contributed to the maintenance of fairly constant merchandising costs. Rail rates, which moved downward in the late 1950's, have remained unchanged for the past 3 years.

The mill margin for 20 typical constructions of cotton cloth averaged fractionally higher in 1963 than in the preceding year. Hourly earnings of textile mill employees rose again in 1963, averaging $1.71 per hour the first 11 months. Textile manufacturers attempted to offset higher costs of labor and other inputs by further shifts to more modern machinery and to less expensive manmade fibers. These efforts have been

Table 11.--Cotton products: Average retail price, average farm value, farm-retail spread, and farmer's share of retail price for the composite of 25 products, for business shirts, and for sheets, 1954-63

Year	Composite of 25 products				Business shirts				Sheets			
	Retail price 1/	Average farm value 2/	Farm retail spread	Farmer's share of retail price	Retail price 3/	Average farm value 4/	Farm retail spread	Farmer's share of retail price	Retail price 3/	Average farm value 4/	Farm retail spread	Farmer's share of retail price
	Dollars	Dollars	Dollars	Percent	Dollars	Dollars	Dollars	Percent	Dollars	Dollars	Dollars	Percent
1954	2.08	0.33	1.75	16	3.91	0.29	3.62	7	2.10	0.76	1.34	36
1955	2.07	.34	1.73	16	3.88	.30	3.58	8	2.05	.76	1.29	37
1956	2.10	.33	1.77	16	3.86	.29	3.57	8	2.16	.76	1.40	35
1957	2.12	.32	1.80	15	3.92	.29	3.63	7	2.22	.74	1.48	33
1958	2.11	.32	1.79	15	3.92	.30	3.62	8	2.14	.75	1.39	35
1959	2.12	.31	1.81	15	3.97	.29	3.68	7	2.16	.72	1.44	33
1960	2.17	.30	1.87	14	4.16	.27	3.89	6	2.22	.68	1.54	31
1961	2.19	.31	1.88	14	4.24	.27	3.97	6	2.23	.70	1.53	31
1962	2.15	.33	1.82	15	4.24	.28	3.96	7	2.24	.73	1.51	33
1963 5/	2.17	.32	1.85	15	4.27	.28	3.99	7	2.25	.73	1.52	32

1/ Expressed in terms of 1 pound of lint cotton; retail cost of 25 itmes divided by the number of pounds of lint cotton estimated to be required for their manufacture.

2/ Estimated farm value of cotton of grades and staple lenghts suitable for manufacture of the products, less allowance for value of salable spinning waste, divided by the number of pounds of cotton required.

3/ Price per item. Computed by applying Bureau of Labor Statistics indexes to annual average prices in 10 cities in 1953.

4/ Farm value of the quantity of cotton of grade and staple length suitable for manufacture. Byproduct adjustments of 10 percent and 2 percent, respectively, of the gross farm value of cotton for business shirts and for sheets were made to allow for the value of spinning waste.

5/ Preliminary.

only partially successful, however. Profits of textile mill firms before taxes averaged 4.7 percent of sales during the first 9 months of the year, down from 4.9 percent in the same months of 1962, but above the previous 10-year average of 4.3 percent.

Data are not available for 1963 on gross margins for apparel manufacturers or for wholesalesalers and retailers. However, preliminary information indicates that these margins were not greatly different from 1962 figures of 30 percent of the consumer's dollar going to the apparel manufacturers and the 41 percent going to retailers and wholesalers.

Marketing Bill for Cigarettes

Expenditures for cigarettes have risen almost continuously since 1946. The total retail value of cigarettes consumed domestically increased from $3.0 billion in 1947 to $6.8 billion in 1962 (fig. 14). This increase was associated with a gradual uptrend in both consumption and prices of cigarettes. Average annual use of cigarettes per person of 15 years and older rose from 3,203 in 1947 to 3,958 in 1962, an increase of 755 cigarettes per person. The average retail price of a pack of regular cigarettes rose from 18.2 cents in 1947 to 27.7 cents in 1962; prices of kings and filter cigarettes also increased.

Marketing charges have increased substantially along with increased domestic expenditures for cigarettes. The marketing bill, excluding Federal, State, and local taxes, went from $1.2 billion in 1947 to $3.0 billion in 1962. Retail and wholesale distributors increased their combined returns from $584 million to $1,406 million, thereby raising their share of consumer expenditures for cigarettes from 19.2 percent of the retail value to 20.7 percent.

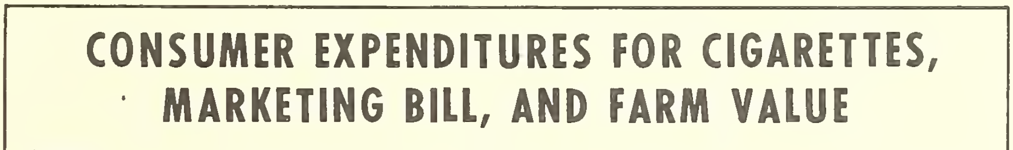


Figure 14

Manufacturers' gross returns increased even more--from $591 million to $1,632 million, and the manufacturer's share of the total retail value of cigarettes increased from 19.4 percent in 1947 to 24.0 percent in 1962.

Tobacco growers, on the other hand, did not share proportionally in the increased consumer expenditures of $3.8 billion. Total returns to farmers for tobacco used in cigarettes increased only $254 million--from $418 million in 1947 to $672 million in 1962 (fig. 14). Although farm prices of cigarette tobacco increased from an average of 43.9 cents per pound in 1947 to 59.4 cents in 1962, the increase was not sufficient to offset the effect on manufacturer's costs of the reduction in tobacco required per 1,000 cigarettes. The proportion of consumer expenditures for cigarettes received by farmers averaged 9.9 percent in 1963 compared with 13.7 percent in 1947.

Excise and use taxes levied against cigarettes also increased during the period. In 1947, Federal, State, and local governments collected approximately $1.5 billion compared with $3.1 billion in 1962. The Federal excise tax, which was 7 cents per pack in 1946, was raised to 8 cents in 1951; taxes collected increased from $1.2 billion to $2.0 billion from 1947 to 1962. Taxes collected by State and local governments, which have risen relatively more than Federal taxes, increased from $0.3 billion to $1.1 billion. Although taxes rose $1.6 billion between 1947 and 1962, the proportion of consumer expenditures going to the various Government agencies declined slightly. About 45 percent ot the 1962 retail value of cigarettes was comprised of excise and use taxes compared with approximately 48 percent in 1947.

The increasing popularity of filter-type cigarettes, the fuller utilization of the tobacco leaf by manufacturers, and the tendency of State and local governments to raise taxes on cigarettes are important developments affecting the marketing bill for cigarettes.

Increased expenditures for advertising greatly stimulated consumer acceptance of filter-tip cigarettes following publicity about the health hazards of smoking in the early 1950's. The 6 major cigarette firms increased their total expenditures for advertising from $132 million to $237 million between 1954 and 1960, according to the Internal Revenue Service. Trade sources estimate that advertising expenditures per pack are twice as large for filter as for nonfilter cigarettes.

The replacement of a part of the tobacco in a cigarette with a filter, plus processing technology which allows utilization of a greater portion of the leaf, has resulted in substantial savings to manufacturers. The farm-sales weight of domestic tobacco used in 1,000 cigarettes declined from 2.875 pounds in 1950 to 2.290 pounds in 1962, a reduction of 20 percent. Total tobacco usage (unstemmed processing weight), including imported tobacco, was reduced 16 percent. Most of the decline occurred after 1954. Based on 1954 utilization, estimated savings for 1960 amounted to about $143 million. Between 1954 and 1960, net profits (before income taxes) of the 6 leading manufacturers rose from $288 million to $518 million. A substantial portion of this gain can be attributed to the decline in tobacco requirements in making cigarettes.

TECHNOLOGICAL DEVELOPMENTS AFFECTING MARKETING COSTS

Technological innovations of many kinds will affect future marketing costs. The Marketing Economics Division is conducting research to develop information that will aid farmers and marketing firms to introduce and adjust to some of these innovations. Some results of studies completed in 1963 are reported in this section.

Costs and Economies of Scale in Processing Turkeys

Costs of processing turkeys can be reduced from present levels by increasing plant size, making better use of capacity, and organizing processing and managerial operations to achieve maximum output per employee, according to a recent study. Synthetic models of turkey processing plants were developed from data gathered in a survey and from secondary sources. These models were analyzed to provide management with guidelines for improving the efficiency of operations.

When model plants operate at capacity, processing heavy young hen turkeys weighing 13 pounds each (ready-to-cook), costs decline from 6.9 to 4.5 cents per pound as plant size increases from 200 to 4,000 head per hour of operation. More than half the cost decline results as plant size increases from 200 to 800 head per hour; more than three-fourths results as plant size increases from 200 to 1,500. Similar results are obtained for other types of turkeys.

This research suggests that there will be a movement toward fewer and larger plants to realize economies of scale. The extent and speed of this movement will be affected by costs of supplying the turkeys for processing.

Costs of Freeze-Drying Foods

Both military and civilian consumption of foods processed by freeze-drying is expected to increase substantially between now and 1970. Civilian consumption is expected to move from approximately 11 million to 250 million pounds of freeze-dried products in reconstituted form. Major volumes will be in meats, vegetables, fruits, and juices. Freeze-dried foods will fill a need for products that are palatable, lightweight, and can be stored without refrigeration. Costs of drying in the freeze-drying process add substantially to processing costs. Freeze-drying will tend to increase marketing charges and reduce the percentage of the consumer dollar received by farm producers of products to be freeze-dried. However, freeze-drying may provide a market for additional quantities of some farm products and thus increase average prices received by farmers.

Costs of freeze-drying vary among products by size of plant and length of season. Generally, the longer the season and the larger the plant, the lower the costs. Specifically, for a plant processing 8 tons of material per day and operating 250 days a year, freeze-drying costs are about 6 cents per pound of water removed. If the plant operates 100 days, the probable cost is 11 cents per pound. A plant capable of processing 3 million pounds of meat per year may anticipate costs of 4.4 cents per pound of water removed. Plants now in operation have a comparable cost of 8 cents per pound.

These costs represent only those for the freeze-drying process. They include neither packaging nor the freezing of products in preparation for freeze-drying. The relatively high freeze-drying processing costs are partly offset by the reduction in transportation costs resulting from the removal of about 95 percent of the water content of foods that are freeze-dried. If continuous processing, rather than batch freezing, is achieved, costs will be significantly reduced. Other technological developments also may reduce costs.

Radiation Pasteurization

The Marketing Economics Division is conducting, for the Atomic Energy Commission, a study of the economic feasibility of radiation pasteurization of fresh fruits and vegetables. This study is a part of the program to develop peaceful uses of atomic energy. Preliminary results indicate that radiation pasteurization holds promise of becoming a feasible way to increase shelf life of products, maintain desirable produce quality, and reduce spoilage losses of fresh fruits and vegetables.

The study thus far has provided preliminary estimates of the reduction in spoilage to be expected from radiation pasteurization of strawberries. It is estimated that a 200 kilorad dose of ionizing radiation applied to fresh strawberries could reduce the spoilage during marketing to about 5 percent of the shipping weight. The average loss now probably approximates 15 percent. In terms of the U.S. average retail price of strawberries during 1959-62, the savings from this reduction in spoilage would amount to 4.5 cents per pound of strawberries at the shipping point. Preliminary estimates of the cost of radiation pasteurization range from 0.1 cent to 3.1 cents per pound, depending on the following factors:

Factor	
Type of radiation source	Electron machine or Cobalt 60
Rated size of radiation processing facility	3, 5, 30, or 60 kilowatts
Hours operated annually	1,000 - 6,000

Accordingly, net savings expected to result from pasteurization would range from 1.4 to 4.4 cents per pound.

Radiation-pasteurized products are completely safe for consumption, but slight changes sometimes take place in their nutritive value, color, and flavor. Laboratory research by the University of California, Michigan State University, and the Agricultural Marketing Service indicates that none of these factors constitute a serious objection to radiation processing. This research further substantiates that 200 kilorads of ionizing radiation can successfully pasteurize fresh strawberries and thereby significantly reduce spoilage losses in marketing.

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Some Economic Considerations for the Hide and Leather Industry. Speech presented before National Hide Association Training School, April 1963.

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In each issue there are sections on marketing and the consumer which summarize in short articles and notes materials from research on price spreads of special interest to these groups.

Service, USDA's Report to Consumers.

Service is a monthly newsletter of consumer interest which is designed for those who report to the individual consumer, rather than for mass distribution. It also carries items on costs and new marketing developments of special interest to consumers.

Radio Presentations

Interview - Freezing Bread
Interview - Power Costs for Drying Cotton
Interview - Economic Feasibility of Radiation Pasteurizing
Interview - Breakfast Foods
Interview - Turkey Processing Costs
Interview - St. Lawrence Seaway
Interview - Fruits and Vegetables
Interview - Vegetable Consumption

Television

Interview - Broilers

Exhibits

Assisted with Restaurant and Feed Associations Exhibits, Chicago.

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